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The Success of E-Filing Adoption during COVID 19 Pandemic: The Role of Collaborative Quality, User Intention, and User Satisfaction

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A R T I C L E I N F O

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A B S T R A C T

This study aims to test the successful use of e-filing information systems in tax return reporting, which is more widely used by taxpayers during the COVID 19 pandemic to report tax return than before. Data were obtained by a survey using a questionnaire with taxpayers as respondents. The purposive sampling method was used to collect data, with the final results of 93 respondents. The partial least square results for data processing reflect that service quality and collaboration quality are determinants of e-filing user satisfaction, while user intentions only influenced by collaboration quality. Overall, this study can support the model that the success rate of e-filing is determined by user intentions and user satisfaction, which is shown by the net benefits generated from using e-filing systems. This study suggests that the Directorate General of Taxation needs to increase user satisfaction and user intention mainly through collaborative quality.

A B S T R A K

Penelitian ini bertujuan untuk menguji keberhasilan penggunaan sistem in-formasi e-filing dalam pelaporan SPT, yang lebih banyak digunakan wajib pajak saat pandemi COVID-19 untuk melaporkan SPT dibandingkan sebelumnya. Data di-peroleh dengan survei menggunakan kuesioner dengan wajib pajak sebagai re-spondennya. Metode purposive sampling digunakan untuk pengumpulan data, dengan hasil akhir responden sebanyak 93 subjek. Hasil partial least square untuk pengolahan data mencerminkan bahwa kualitas pelayanan dan kualitas kolaborasi merupakan faktor penentu kepuasan pengguna e-filing, sedangkan intensi pengguna dipengaruhi oleh kualitas kolaborasi saja. Secara keseluruhan, penelitian ini mampu mendukung model bahwa tingkat keberhasilan pengaplikasian e-filing ditentukan oleh intensi pengguna dan kepuasan pengguna e-filing tersebut, yang ditunjukkan dengan adanya manfaat bersih (net benefit) yang dihasilkan dari penggunaan sistem e-filing. Penelitian ini menyarankan bahwa Direktorat Jenderal Pajak perlu mening-katkan kepuasan pengguna dan intensi pengguna terutama melalui peningkatan kualitas kolaborasi.

1. INTRODUCTION

COVID-19 virus, also known as the novel coronavirus, has had a large impact in various fields, resulting in a number or rate of human death, which is quite high and has an impact on the economy. Many countries experience financial difficulties, and even some countries experience an economic slump. All state budgets are directed at addressing this pandemic problem, especially the budget for discovering this virus vaccine and providing assistance for citizens affected by this virus. Almost all fields experienced difficulties due to this pandemic. Not only residents who are no longer able to work because the company suffered setbacks and have to cut employees, but also because no one else is buying merchandise due to the decreased purchasing power.

One way that can be taken to inhibit the spread of this virus is the application of social distancing/physical distancing. This policy has caused many businesses that cannot operate anymore, such as food stalls/restaurants, hotels, malls, and other places to gather. When these places cannot operate, this will impact government

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revenues, which are also hampered, including the tax and retribution sectors. The government is in dire need of large funds to run the wheels of government, so some sectors such as taxes, are still maintained. Some incentives in the tax sector are given to ease the burden on the community. The development of the system is carried out to facilitate the community in fulfilling their obligations, including by implementing e-filing for tax reporting and calculation.

The development of world technology today has been very advanced and has penetrated various fields, including taxation. Concerning taxation, the Indonesian government undertakes tax reform to implement a new system so that the community performs its obligations more easily, efficiently, and effectively. In the field of taxation, Indonesia has reformed, among others, by changing its tax collection system, which initially took the form of an official assessment system or the tax calculation carried out by the tax officers turned into a self-assessment system, namely transferring the authority to calculate, pay, and report a tax on taxpayers. This change aims to give citizens the authority to calculate how much money will be paid by the taxpayer to the state because of some difficulties experienced when using the official assessment system. For example, tax officers do not know exactly how much income is owned by a taxpayer. Giving support for tax revenue and reporting can be more efficient, effective, online, and real-time. The government has developed information systems for tax return (Surat Pemberitahuan Pajak, abbreviated as SPT), called e-filing, which began to be implemented since 2014. This application aims to provide various facilities for taxpayers, so they can continue to perform their obligations.

Some of the advantages of e-filing, among others, are that taxpayers do not need to go to the tax office and wait for a queue to report taxes. Besides, the application of e-filling for reporting tax return becomes faster and more efficient, because last year's filling data can be recalled. Another advantage of e-filing compared to manual systems is that tax return reporting can be done without being limited by distance, time, and place. This considered very helpful for taxpayers, especially in the current pandemic.

Based on the Directorate General of Taxation data, the realization of annual tax return delivery from March 18, 2020, amounted to 7.76 million. From these data, 312,669 were tax returns that submitted manually. This number has decreased by around 23.31% compared to the same date last year. This indicates that at the beginning of the pandemic, taxpayers switched to the electronic system and left the manual system. Moreover, the number of taxpayers using e-filing is increasing when the epidemic is widespread.

Supported systems for information technology, including e-filing systems, will be considered beneficial for the organization or individuals if it is an efficient and effective system. However, according to Furukawa and Minami (2013), the assessment of the quality of information system effectiveness of the quality was a difficult thing to do. The theory used to explain the success of an information system is the success model proposed by DeLone & McLean (2003), which is the development of the model proposed earlier in 1992. In this model, the main components that determine the success of an information system are the user's intention to use, and the satisfaction felt. At the same time, the factors that determine users' intention and satisfaction in using information systems are the quality of the system, the quality of information, and the quality of service.

Research on the success of information systems has been widely carried out (Alhendawi & Baharudin, 2013; Fendini et al., 2014; Kartika et al., 2016; Raminda & Ardini, 2014; Sharabati et al., 2015). Raminda and Ardini (2014) found that user satisfaction determines individual performance. Fendini et al. (2014) found that the quality of the system and the quality of information is the determinant for employee satisfaction in using a centralized customer service application. Alhendawi and Baharudin (2013) found that user satisfaction is an important mediating variable that determines the successful use of web-based management information systems. Different results were stated by Kartika et al. (2016), who found that information quality did not affect user satisfaction. While Sharabati et al. (2015) found that the determinants of user satisfaction are processing, content, and usability, which then this user satisfaction will affect individual performance.

Research related to the success of e-filing and e-SPT has also been conducted by Hidayati et al. (2017), Khairrunnissa and Yunanto (2017), Widyadinata and Toly (2014), which analyzed the influence of two main variables in the D&M model (DeLone & McLean, 2003). These studies try to examine the influence of information quality and system quality on the user's perceived satisfaction related to e-SPT or e-filing. The results of Hidayati et al. (2017), Widyadinata and Toly (2014) found the

quality of information and the quality of the system influences the user satisfaction of e-filing. The different results were found by Khairrunnissa and Yunanto (2017), showing that e-filing user satisfaction was only determined by the system quality. In contrast, information quality did not have an impact on user satisfaction.

Several studies test the successful use of e-filing by testing old models developed by DeLone and McLean (Hidayati et al., 2017; Khairrunnissa & Yunanto, 2017; Widyadinata & Toly, 2014). The results of previous studies that are still not consistent might be due to the study's focus on user satisfaction and have not explored user intentions as variables that mediate system success other than user satisfaction. This research is important because the e-filing system's success testing model is tested using the complete DeLone & McLean (2003) model and adding collaborative variables that include interactions between users and system providers that will determine user satisfaction and intentions. This interaction might become an important variable that users should consider using e-filing. Interaction between tax officers as e-filing service providers and taxpayers as e-filing users will determine user satisfaction. Subsequently, taxpayers will continue to use the system to lead the success of the e-filing system. The contribution of this study is that it tries to add a collaboration variable that is still rarely explored, which is a variable that shows the interaction between the taxpayer and the tax authorities related to the application of this electronic tax return.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

DeLone and McLean Model's

The main theory in analyzing this phenomenon is the DeLone and McLean (D&M) success model (DeLone & McLean, 2003). This is an updated model for the first model developed in 1992. According to the D&M model, the success of an information system can be evaluated from the satisfaction of the system user, while user perceptions of system quality and information quality are variables that determine user satisfaction (DeLone & McLean, 1992). The satisfaction in using e-filing can be determined by the system quality and the information quality of e-filing. When the taxpayer felt that the e-filing information to be timely and accurate and the information is useful, he will be satisfied using the e-filing system.

In the next model's development, this model found there is another variable determining user satisfaction, namely service quality. This variable will also affect user intentions. The intention of the user, together with customer satisfaction, will provide a net benefit (success) to the adoption of information systems. When taxpayers use e-filing, their satisfaction is determined not only by the information quality and the system quality of the e-filing but also by the quality of the service provided by the tax officer. Therefore, this study adds the interactions between taxpayers and tax officials also affect taxpayer satisfaction, called collaboration quality (Chen et al., 2007; Ruivo et al., 2012). This quality, together with information quality, system quality, and service quality, will also determine the intentions of e-filing users. User satisfaction and user intentions are the mediating variables that determine the successful use of e-filing.

Several studies related to the success of information systems have been conducted by several researchers, including Alhendawi and Baharudin (2013), Fendini et al. (2014), Kartika et al. (2016), Raminda and Ardini (2014), Sharabati et al. (2015). These studies show that user satisfaction is determined by two main variables: information quality and system quality. These results indicate that user satisfaction will increase when users feel the quality of information and the quality of the system is better. Research related to the success of the e-filing system has also been conducted by Hidayati et al. (2017), Khairrunnissa and Yunanto (2017), Widyadinata and Toly (2014). However, the study results are still inconsistent. Therefore, this research is important to see the compatibility of the results with the model developed by DeLone and McLean on the successful use of the e-filing system. The results will be very helpful to taxpayers in reporting and filing electronic tax returns. In this research model, the satisfaction and intention of taxpayers in using e-filing was determined by the system quality, the information quality, the service quality, and the collaboration quality, which in turn the taxpayer satisfaction and intention of continuing using e-filing will affect the net benefits or the successful use of the e-filing.

Influence of Information Quality on User Satisfaction and Intention

Information quality was defined as output quality in the form of information that results from the adoption of an information system (Rai et al., 2002). Output accuracy, output timeliness, and relevance of output are some of the things that can be used as indicators to determine the quality of information (Hartono, 2005). The results showed that user

satisfaction and user intentions from the adoption of an information system could be indicated from the good quality of the system which was then can provide convenience and benefits to the system users (Alhendawi & Baharudin, 2013; Fendini et al., 2014; Kartika et al., 2016; Purwaningsih & Susanti, 2010; Rahayu et al., 2018; Raminda & Ardini, 2014; Sharabati et al., 2015). A good information quality of e-filing will make taxpayers feel happy and satisfied with the e-filing. Therefore, they want to continue to use the system. Based on the above analysis, the hypotheses that will be tested are:

H_1: Information quality of e-filing has a positive effect on taxpayers' intention.

H_2: Information quality of e-filing has a positive effect on taxpayers' satisfaction.

Influence of System Quality on User Satisfaction and Intention

The system's quality is defined as the ability of a system to provide information following the needs of its users (DeLone & McLean, 1992). One indicator of system quality is the speed of accessing the system. Several previous studies have shown that the quality of the system is an indicator to show intention and satisfaction of users of information systems (Alhendawi & Baharudin, 2013; Fendini et al., 2014; Kartika et al., 2016; Purwaningsih & Susanti, 2010; Rahayu et al., 2018; Raminda & Ardini, 2014; Sharabati et al., 2015). When the e-filing system has a high access speed, the user (taxpayers) will feel more satisfied, and at the same time, they have the intention to adopt the e-filing system. Based on the analysis, the research hypotheses that will be tested are:

H_3: System quality of e-filing has a positive effect on taxpayers' intention.

H_4: System quality of e-filing has a positive effect on taxpayers' satisfaction.

Influence of Service Quality on User Satisfaction and Intention

Service quality is the quality of support from the tax officers as a system developer to taxpayers as e-filing users. The dimensions of this quality are assurance, empathy, and responsiveness (DeLone & McLean, 2003). Several studies have revealed that service quality influences the use of a system (Cao et al., 2005; Harris & Goode, 2004) and user satisfaction (Cao et al., 2005; Sukesi & Yunaidah, 2020). Service quality is considered the most important thing compared to the others because the system user is now more perceived as a customer and is no longer considered a system user at the company (DeLone & McLean, 2003). Thus a bad support system will lead users to switch to another system. Therefore, if the quality of services provided by the tax authorities on the use of e-filing is getting better, then it will make taxpayers feel happy and be more satisfied with the use of the system, so they will intend to continue using the system. Thus, the research hypothesis that will be tested are:

H_5: Service quality of e-filing has a positive effect on taxpayers' intention.

H_6: Service quality of e-filing has a positive effect on taxpayers' satisfaction.

Influence of Collaboration Quality on User Satisfaction and Intention

Collaboration quality is defined as the integration and exchange of information, decision making, and resource sharing (Johnson & Whang, 2002) and creating a shared workplace and information flow (Pereira & Soares, 2007). Interactions between internal and external applications are key to the success of online collaboration (Chen et al., 2007), thereby increasing the perception of intention and user satisfaction and then leading to higher values (Ruivo et al., 2012). A well-developed interaction between the tax authorities and taxpayers causes taxpayers to feel happy and then satisfied with the use of e-filing and will further continue to use e-filing. Based on this analysis, the research hypotheses developed are:

H_7: Collaboration quality of e-filing has a positive effect on taxpayers' intention.

H_8: Collaboration quality of e-filing has a positive effect on taxpayers' satisfaction.

Influence of User Satisfaction on User Intention

User satisfaction is defined as the results of evaluations given by someone for the felt experience, at least the evaluation results are as good or as expected (Tjiptono, 2008). Some indicators to measure e-filing user satisfaction include the extent to which taxpayers are happy to adopt e-filing, the extent to which the taxpayers feel satisfied with services provided by tax officials when they are using e-filing, and the extent of speed and ease of service from the tax officials capable for making

taxpayers satisfied when using the system. Rahayu et al. (2018) found that the user's satisfaction can have a positive impact on the use of an information system. Thus, the higher satisfaction felt by taxpayers when using e-filing for filling and reporting tax, the greater the desire of taxpayers to continue to adopt e-filing. Based on the description, the hypotheses that will be tested is:

H$_9$: Taxpayers' satisfaction in using e-filing has a positive effect on taxpayers' intention.

Influence of User Satisfaction and Intention on the Net Benefits

The information systems impact the quality of user performance both as an individual and an organization. It means that information system provides a net benefit to the users (Hartono, 2007a). Indicators measure this net benefit by increasing various abilities, communication effectiveness, reduced information search time, and productivity. Previous studies state that applying a good information system will bring benefits to the organization or individual, which indicates the successful use of the system (Alhendawi & Baharudin, 2013; Rahayu et al., 2018; Sharabati et al., 2015). When the use of an e-filing system is higher, the productivity of its performance will be higher so that the higher the net benefits obtained. This will be felt when the use of this e-filing can meet taxpayers' needs and the system runs well. So it can be said that e-filing will have a positive performance impact if the system provides a sense of satisfaction and rapid response to the use of e-filing. Based on this analysis, the hypotheses to be developed are:

H$_{10}$: Taxpayers' intention on e-filing systems has a positive effect on e-filing success.

H$_{11}$: Taxpayers' satisfaction on e-filing systems has a positive effect on e-filing success.

Based on the hypotheses built above, the following is the research model used.

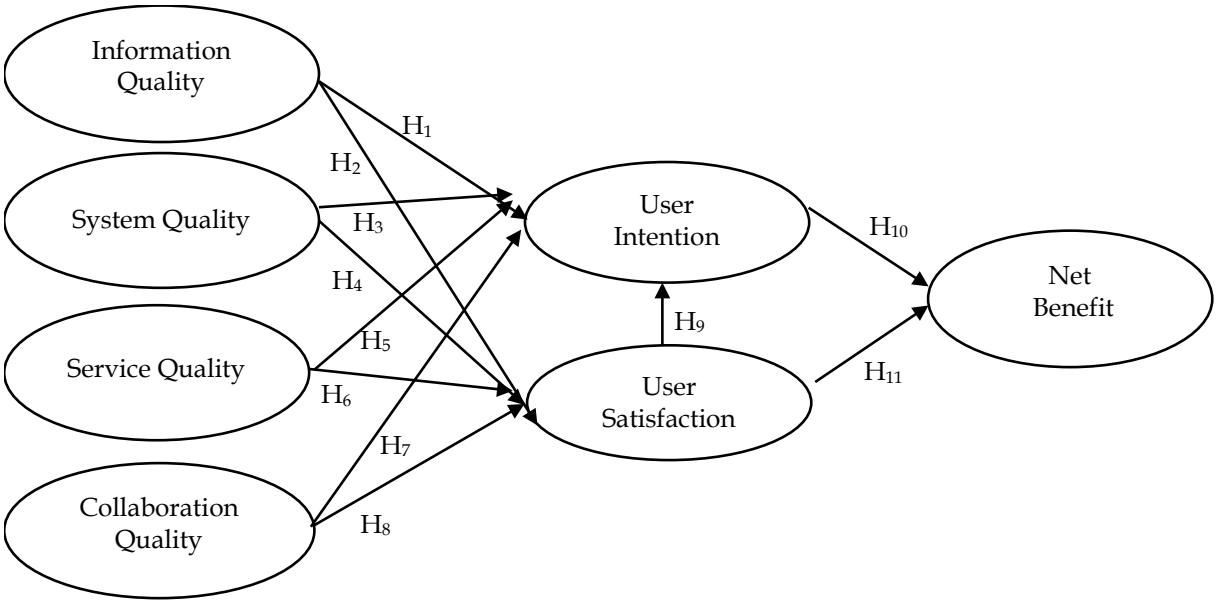

Figure 1. Research Model

3. RESEARCH METHOD

The study was conducted by a survey using a questionnaire instrument to get the data. The object of research is the e-filing information system used to fill in and report tax return, with taxpayers as research subjects. The respondents are taxpayers who have Taxpayer Identification Number (Nomor Pokok Wajib Pajak, abbreviated as NPWP) and have used e-filing.

Item questions for research instruments were adopted from previous research. Construct of information quality, system quality, service quality, intention to use, system use, and net benefits are adopted from DeLone & McLean (2003). The collaboration quality measurement is adopted from Chen et al. (2013). The items used have been proven valid and reliable. However, before the questionnaire was distributed to respondents, the

questionnaire was discussed with experts in advance so that the existing sentences did not cause bias for the respondents. By using the questionnaire, respondents were asked to provide responses to their experiences related to the use of e-filing for tax return reporting, especially during COVID-19 conditions. Each question item is measured using a Likert scale of 1 to 5, starting from a scale of strongly disagree (1) to a scale of strongly agree (5). There are two questions negated; this was done with the aim that respondents do not fill randomly. For the negated sentence, the marking is reversed.

The validity construct is a measure of whether the applied instrument results are following the theory used to develop a construct (Ghozali & Latan, 2015; Hartono, 2007b). Validity is a test to find out whether an instrument valid or not. When an instrument can measure what should be measured, then it is a valid instrument. Another way to test the convergent validity of a measurement can be shown from the value of Average Variance Extracted (AVE) with a rule of thumb> 0.5. While the value of cross-loading can be used to measure discriminant validity, the rule of thumb is that the loading to other constructs must be lower than the value of loading to the construct (Ghozali, 2006).

The reliability is a test to measure an instrument's reliability, if the results of measurement give the same results when measured using the same instrument on the same phenomenon, then the measuring instrument can be said to be a reliable instrument (Hartono, 2008). The Cronbach's Alpha value can be used to test the instrument reliability of the construct used, with a limit of> 0.6 (Ghozali, 2006).

Partial Least Square (PLS) is used in this study for hypothesis testing. The advantages of PLS, among others, can be used for small numbers of samples, but to further increase the estimation precision, it is better to use large sample sizes. The other advantage is that PLS does not require normally distributed assumptions like using a structural equation model (SEM), can be used for reflective or formative models, and the maximum number of indicators can reach 1000 indicators (Hair et al., 2014).

In testing the research model, researchers try to test whether the information quality, system quality, service quality, and collaboration quality affect the taxpayers' intentions to continue using e-filing and the satisfaction of taxpayers when using e-filing. Next, testing was conducted to prove whether taxpayers' intention and satisfaction will affect the net benefit/success of using e-filing. This study does not intend to test taxpayers' intention and satisfaction as a mediating variable, so there is no testing of the mediating effect.

4. DATA ANALYSIS AND DISCUSSION

Descriptive Statistic

The data is collected using Google forms and disseminated using *whats apps* media. The criteria used in this study are taxpayers who already have an NPWP and have used e-filing. Subjects used as respondents are individual and corporate taxpayers who have used e-filing before. This is intended so that respondents truly understand the use of e-filing and can provide responses related to the system's adoption to replace the manual system in the Corona situation. Items of the questionnaire used. Two questionnaires were negated with the aim that respondents would fill in earnest or did not fill in randomly. From the initial 108 respondents, 15 respondents answered inconsistently, so these respondents had to be excluded from the data because they did not meet the requirements. Thus the final respondents used were 93 respondents.

Table 1. Result of Data Collection

Description	**Amount**	%
The questionnaire collected	108	100
Incomplete questionnaire	15	13,89
The questionnaire that meets the requirement	93	86,11

Of the 93 respondents, 36 people (38.7%) were male, while 57 people (51.3%) were female. Thus the research respondents were dominated by women. Concerning the level of education, one person (1.1%) is a high school graduate, five people (5.4%) have a diploma degree, thirteen people (14%) have an undergraduate degree, forty-seven people (50.5%) have a master's degree, and twenty-eight people (30.1%) had a doctorate degree. This indicates that most of the respondents came from among those who have a high level of education. In relation to work, one person (1.1%) is a state-owned enterprise

employee, one person (1.1%) is a retired civil servants, two people (2.15%) are students, fifty-five people (59.14%) are teachers/lecturers, and twenty-one people (22.6%) entrepreneurs. The data shows that respondents who are teachers/lecturers and entrepreneurs are dominant. They are more likely to use e-filing for filling and report tax return as voluntary rather than mandatory.

Instrument Testing

Testing for the measurement model evaluation (outer model) as a test of validity and reliability obtained the following results. The result of the convergent validity test shows that the loading factor of each indicator variable fulfills the requirement> 0.6. It can be concluded that the indicators of all variables used in the study are valid. The convergent validity based on the AVE value has values above 0.5; thus, all research variables are valid. Testing discriminant validity by using cross-loading, i.e., loading to other constructs, must be lower than the loading value to the construct. Based on the PLS output results, it is obtained that all variables are valid. Overall, the validity testing results prove that all variables are valid, including variables of information quality, system quality, service quality, collaboration quality, user satisfaction, user intensity, and net benefits (Table 2).

The instrument's reliability test show that all variables have a Cronbach's Alpha value above 0.8 for all variables, only the user satisfaction variable has a Cronbach's Alpha 0.794. The results indicate that the value is entirely above the rule of thumb of > 0.7; thus, all variables can be said to be reliable. Whereas for composite reliability testing, it can be seen that all values are above 0.8; even for net benefits, the value is 0.913. These results indicate that all variables used in research are reliable.

Hypothesis Testing

Table 3 shows the results of the research hypothesis testing. The information quality does not significantly affect user intentions and user satisfaction, as pointed by a p-value of 0,713 and 0,447, reflectively. The results reflect that this test failed to support the H_1 and H_2 hypotheses, which state that the information quality positively influences the users' intentions and satisfaction of e-filing. The results of the study are not following the results of Hidayati et al. (2017), Widyadinata and Toly (2014), but it is consistent with Krisdiantoro et al. (2018). They found that information quality does not affect the intensity of using management information systems for direct procurement. The results are also consistent with Widodo et al. (2013), which states that the information quality does not influence the intensity of e-billing use in internet cafes.

It presents the analysis of the related results, theories, and hypotheses (if any) based on the writer's reasoning (Donahue-Wallace & Chanda 2005). Data analysis and discussion should be presented in brief but clear and it is not dominated by table presentation. The tables which are presented should not be the rough output but in the processed and brief summary. Tables and pictures are presented consistently in the center and the titles are above for the tables and below for the pictures (Exelby 1997). It presents the analysis of the related results, theories, and hypotheses (if any) based on the writer's reasoning. Data analysis and discussion should be presented in brief but clear and it is not dominated by table presentation. The tables which are presented should not be the rough output but in the processed and brief summary. Tables and pictures are presented consistently in the center and the titles are above for the tables and below for the pictures (Mortimer & Cox 1999).

Table 2. Measurement Items

Scale/Items	Loading Factor
Information Quality	
The information available on e-filling is according to the expectations	0.847
The information available on e-filling according to tax return filing and reporting requirements	0.720
The information available on e-filling is useful for filling and reporting tax return	0.806
The information available on e-filling makes it easy to fill in and report a tax return	0.806
The information available on e-filling is varied	0.601
Service Quality	
Tax officials provide services quickly	0.839
Online help is always available on e-filling	0.635
Tax officials are willing to take the time to provide consultation	0.808
Tax officials provide supporting facilities to facilitate access	0.807
Tax employees interact well when the system is in trouble	0.854

User Intention	
I often use e-filling for filling and reporting tax returns	0.694
I use e-filling voluntarily	0.734
I want to use e-filling	0.687
I will use e-filling again	0.856
I will use e-filling in the future	0.788
I expect other people to use e-filling	0.753
User Satisfaction	
The benefits of e-filling are very high	0.790
Using e-filling is fun	0.747
I am not satisfied using e-filling*	0.640
Filling out and reporting tax returns is completed quickly with e-filling	0.757
The use of e-filling increases insight	0.761
System Quality	
E-filling is easy to use	0.669
E-filling can be downloaded quickly	0.727
E-filling provides online help	0.674
E-filling can be mastered quickly	0.692
E-filling has interesting features	0.782
E-filling can be accessed quickly	0.808
E-filling can be used from anywhere	0.664
Collaborative Quality	
E-filling can save documents to the system	0.689
E-filling makes it easy to find the desired data source (for example, last year's tax return data)	0.764
E-filling makes it easy to calculate the income tax payable	0.671
E-filling makes it easy to fill in a tax return	0.839
E-filling makes it easy to report tax returns	0.822
Net Benefit	
E-filling solves problems in filing and reporting tax returns	0.678
E-filling saves costs	0.663
E-filling improves performance in filing and reporting tax returns	0.770
E-filling accelerates the filling and reporting of tax returns	0.776
E-filling increases productivity	0.763
E-filling increases the effectiveness of filing and reporting tax returns	0.766
E-filling improves tax office services	0.757
E-filling improves taxpayer competence in filling and reporting tax returns	0.655
E-filling improves the quality of tax filing and reporting	0.770

* Negative statement, score reversed

The result for testing the influence of system quality on taxpayers' intensity and satisfaction shows that it supports for H_4 and fails to support H_3, this is indicated by p-values of 0,000 and 0.312. The results indicate that system quality is an important thing that taxpayers consider related to the satisfaction of their experience in using e-filing. The results of the study are not in accordance with the results of Hidayati et al. (2017), Rahayu et al. (2018), Widyadinata and Toly (2014), but consistent with Khairrunnissa and Yunanto (2017) who found that e-filing user satisfaction was only influenced by the system quality. The results indicate that the intention to use the e-filing of taxpayers was not determined by the system quality and the information quality. The information generated by e-filing that is up to date, accurate, relevant, were not factors that determined the satisfaction and intentions of taxpayers in using e-filing. The taxpayers will satisfy in using e-filing if he/she feels the system is easy to use, easy to learn, or easy to access.

Table 3. Hypothesis Testing Results

	Coefficient	t-Stat	P-value	Conclusion
Information Quality → User Intention	-0.030	0.368	0.713	Not supported
Information Quality → User Satisfaction	0.069	0.758	0.447	Not supported
System Quality → User Intention	0.103	1.012	0.312	Not supported
System Quality → User Satisfaction	0.428	3.727	0.000	Supported
Service Quality → User Intention	-0.172	2.071	0.039	Not supported
Service Quality → User Satisfaction	0.142	1.538	0,125	Not supported
Collaborative Quality → User Intention	0.360	3.032	0,003	Supported
Collaborative Quality → User Satisfaction	0.265	2.622	0,009	Supported
User Satisfaction → User Intention	0.490	5.846	0.000	Supported
User Intention → Net Benefit	0.264	2.475	0.014	Supported
User Satisfaction → Net Benefit	0.619	6.838	0.000	Supported

Testing the influence of service quality on taxpayers' intentions shows a p-value of 0.039, but the coefficient is negative, i.e., -0.172. These results indicate that H_5, which states that user intentions are positively influenced by service quality is not supported. Likewise, testing for the effect of service quality on user satisfaction (H_6) has a p-value of 0.125, which indicates that the test failed to support the hypothesis. The results of the study are consistent with Rahayu et al. (2018), who fail to show that service quality will affect the use of information systems for academic purposes. The study results reflect that taxpayers' satisfaction and intention to continue using e-filing was not determined by the service quality provided by tax officers. This might because the guidance for filling the tax return has been given clearly and completely in the system so that the taxpayer no longer needs to ask the officer about how to fill the tax return.

Result for testing the influence of collaboration quality on user intentions and user quality shows that both of these tests succeeded in supporting the hypothesis, with p-values of 0.003 and 0.009. This variable is still rarely used in various studies testing the D&M model (DeLone & McLean, 2003). The results of the study are consistent with Chen et al. (2013), which states that the quality of collaboration affects the use and satisfaction of e-commerce users. This indicated that good interaction between tax authorities and taxpayers would lead to user intention and satisfaction in using e-filing to fill and report tax return. With this e-filing, taxpayers find it was easy to fill out and report tax returns.

Testing the effect of user satisfaction on user intentions has a p-value of 0,000. It supports H_9, which states that user intentions are positively influenced by user satisfaction, succeed in getting supported evidence. The study results prove that e-filing users who are satisfied with the e-filing system's adoption will then re-use the e-filing service. The study results are following the study of DeLone & McLean (2003); Rahayu et al. (2018). The research proves that taxpayers satisfied with the various services provided in e-filing would encourage them to continue using e-filing. When the taxpayer feels that using e-filing is beneficial for him and accelerates his work, he will use e-filing to fill and report the next tax return.

The last results for testing the relationship between user intentions and satisfaction with the net benefits in using e-filing support the hypothesis, with p-valued of 0.014 and 0.000. The study results are consistent and provide support for the D&M model (DeLone & McLean, 2003), which reveals that the success of the e-filing system is shown by the satisfaction and intentions of taxpayers using e-filing to fill and report tax return. This study is consistent with several other studies (Alhendawi & Baharudin, 2013; Rahayu et al., 2018; Sharabati et al., 2015). This study proves that taxpayers' satisfaction and intention to continue using e-filing is a factor influencing the success of the system. The higher the taxpayers' level of satisfaction and the more often the uses e-filing, the more benefits they will get, including time savings, cost savings, as well as, increased effectiveness and productivity. The results prove that taxpayers' satisfaction and intentions are variables that mediate the influence of information quality, system quality, service quality, and collaboration quality in determining the successful use of e-filing.

When all the services provided are good, this will affect the taxpayer's satisfaction and intentions, which will determine the successful use of the e-filing.

The overall results of the study indicate that the desire of taxpayers to continue using e-filing is determined by the collaboration quality or good interaction between taxpayers and tax officers. At the same time, the taxpayer's satisfaction in using e-filing is determined by the system quality, namely whether the system is easy to access, easy to learn, or easy to use. It is also determined by good interactions between taxpayers and tax officers, including the ease in communicating with tax officers, facilitating the search for last year data, and facilitating filling out and reporting SPT. When taxpayers feel satisfied with the services provided, it will have an impact on the desire of taxpayers to continue using e-filing, which in turn, both of these factors will lead to the successful use of e-filing. The use of this system will certainly assist taxpayers in fulfilling their tax obligations in the current pandemic.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

The existence of e-filing was considered very helpful for taxpayers in filling out and reporting tax, especially in the current pandemic conditions. By using e-filing, taxpayers no longer need to go to the tax office and wait for the queue to report taxes. The filling and reporting tax return can be done without being limited by distance, time, and place. Another advantage of this online method is that it is faster and more efficient because last year's data can be recalled. A system supported by information technology, including an e-filing system, will be considered beneficial for the organization or individuals if the system is efficient and effective.

This study shows that system quality is a considered by taxpayers in the use of e-filing. Another variable that influences satisfaction in using e-filing is the quality of collaboration. The taxpayer's intentions in using e-filing are only determined by the collaboration quality. Collaborative quality that were rarely examined in previous studies and become the focus of this study succeeded in getting support. This indicates that good interaction between tax officials and taxpayers can provide support to taxpayers' level of satisfaction so that they further continues using e-filing. These results also indicate that the taxpayer who is satisfied with the use of e-filing will tend to continue applying the e-filing.

The success of the information system can be measured by the extent to which the system will contribute to an individual's performance or organization; this was called net benefit. The results of this study shows that the success of e-filing used by taxpayers is determined by the intention and satisfaction of taxpayers when applying the system. Taxpayers who are satisfied will continue using e-filing because they feel that e-filing could improve their performance, facilitate their work in filling and reporting tax, and speed up filling and reporting tax, especially in the current outbreak of COVID-19. In general, this research has succeeded in providing support for the successful information systems model of D&M.

The results of this study suggests that the Directorate General of Taxation needs to increase user satisfaction by improving information quality, system quality, service quality, and collaboration quality. These will increase the level of taxpayer utilization in using e-filing. Thus, both taxpayers and tax offices benefit from increased efficiency and effectiveness.

The main limitation of this study is the relatively short research period, which is during the COVID-19 period. Further research needs to extend a longer period to observe the extent to which e-filing applications continue to benefit taxpayers and tax authorities in various conditions.

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